REMARKS

Favorable reconsideration and allowance of the present patent application are respectfully requested in view of the following remarks. Claims 1-12 were pending prior to the Office Action. Claims 13-21 are added by this Reply. Therefore, claims 1-21 are pending. Claims 1, 7, 13, and 17 are independent.

Allowable Subject Matter

Applicant appreciates the indication that claims 7-12 define allowable subject matter.

Drawings

FIG. 2 is amended to correct the spelling of "receiver". No new matter is introduced.

Rejection under 35 U.S.C. §103(a) based on Henderson and Widmer

In the Office Action, claims 1-6 are rejected under 35 U.S.C. §103(a) as being obvious over Henderson et al. (U.S. Patent No. 6,285,688, hereinafter "Henderson") in view of Widmer (U.S. Patent No. 5,740,186). Applicant respectfully traverses.

For a rejection under 35 U.S.C. §103 to be proper, a *prima facie* case of obviousness must be established. *See M.P.E.P. 2142.* One requirement for establishing a *prima facie* case of obviousness is that the cited references, when combined, must teach or suggest

all claim limitations. *See M.P.E.P. 2142; M.P.E.P. 706.02(j).* Thus, if the cited art fails to teach or suggest one or more elements, the rejection is improper and must be withdrawn.

In this instance, independent claim 1 recites, in part, "decoding the data stream to determine a performance metric based on a number of ***transmission code violations***" (emphasis added). Contrary to the assertion in the Office Action, Henderson does not teach or suggest this feature.

Henderson is directed to managing a telecommunication network. Henderson describes modeling an overall topology of the network and management issues related to the overall topology. *See column 2, lines 34-38 and lines 55-65.* Using the model of the overall topology, synchronization distribution in a telecommunication network may be designed. The design of the synchronization distribution includes loop detection, traceability, diversity assurance, and selection table initialization. *See column 3, lines 52-57.*

To aid in the design functions, Henderson discloses that a quality metric is calculated. In the Office Action, it is asserted that the quality metric, as disclosed in Henderson, is equivalent to the performance metric recited in independent claim 1. *See Office Action, page 2, item 3.* However, as will be shown, the quality metric of Henderson is not based on any type of dynamic performance

parameter such as transmission code violation. Instead, the quality metric is purely based on static characteristics of equipment between point A and point B.

More specifically, Henderson states that the quality metric is a measure of the quality of a particular path for distributing timing to a particular site. *See column 18, lines 46 and 47.* Henderson discloses that the quality metric is based on (1) an empirically determined value corresponding to the degradation of synchronization per mile of optical fiber, (2) an empirically determined value corresponding to the degradation caused by regeneration elements along the synchronization path, (3) a value corresponding to the accuracy of a timing source, and (4) an equipment "slack" factor to account for degradation that occurs over time. *See column 18, line 58, through column 19, line 4.*

It is clear that the quality metric is purely based on the static characteristics of equipment lying between points A and B on a path. The quality metric is ***not*** based on any type of performance parameter.

Indeed, Henderson actually teaches away from the quality metric's being based on any type of dynamic performance parameter. As noted, the quality metric is used to ***predict*** the performance of a network. Based on predictions of performances of multiple paths, a network engineer can choose the best path from among several

alternatives. *See column 19, lines 5-9.* A prediction of network performance necessarily requires that the network be modeled and simulated. Henderson discloses that the telecommunication network configuration is modeled to simulate the behavior of a network and thus study the effect of a proposed network configuration ***prior*** to actual implementation. *See column 3, lines 14-33.* One of ordinary skill in the art would realize that the simulation necessarily requires that the network be predefined and that it cannot be based on any ongoing dynamic performance characteristic.

It is further noted that Henderson is not analogous to the present invention as recited in claim 1, and Widmer cannot properly be combined with Henderson, since Henderson models the behavior of a network based on static characteristics, and Widmer discloses that raw binary data is transmitted over a fiber optic link. The raw data is in no way related to the network behavior modeling disclosed in Henderson.

It is clear that Widmer cannot be relied upon to teach at least the above-noted deficiencies of Henderson. Therefore, independent claim 1 is distinguishable over the combination of Henderson and Widmer.

Claims 2-6 depend directly or indirectly from independent claim 1. Therefore, these dependent claims are also distinguishable for at least due to their dependency from claim 1.

Applicant respectfully requests withdrawal of the rejection of claims 1-6 under 35 U.S.C. §103(a) based on Henderson and Widmer.

New Claims

New claims 13-21 are added by this Reply. It is respectfully submitted that the new claims are distinguishable over the cited references, taken alone or in any combination. Applicant respectfully requests that new claims 13-21 be accepted.

CONCLUSION

All objections and rejections raised in the Office Action having been addressed, it is respectfully submitted that the present application is in condition for allowance, and such allowance is earnestly solicited. However, should there be any outstanding matters that may be resolved by a telephone conference, the Examiner is invited to contact Hyung Sohn (Reg. No. 44,346) at 703-205-8000 in an effort to expedite prosecution.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees

required under 37 C.F.R. §§1.16 or 1.17, particularly extension of time fees.

Respectfully submitted,
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